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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,213	07/02/2001	Shigeo Yoshii	0819-0592	8545

7590 07/02/2003
Mc Dermott, Will & Emery
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Washington, DC 20005

EXAMINER
MONDT, JOHANNES P

ART UNIT	PAPER NUMBER
2826	

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,213

Applicant(s)

YOSHII ET AL.

Examiner

Johannes P Mondt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2-11 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 12, 13 and 15-22 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/10/3 has been entered as Paper No. 17.

Information Disclosure Statement

The examiner has considered the items listed in the Information Disclosure Statement filed 4/28/3 as Paper No. 14.

Response to Amendment

Amendment C filed 6/10/3 has been entered as Paper No. 18 in light of the Request for Continued Examination. In Amendment C Applicant canceled claim 14, amended claims 1, 15 and 20.

Allowable Subject Matter

2. ***Claims 1, 12-13 and 15-22*** are allowed.
3. The following is an examiner's statement of reasons for allowance: Neither the Prior Art as Admitted by Applicant nor Fujii et al nor Duncan as cited in the rejection in Paper No. 13 (Final Rejection) teach the base electrode to be

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electrically connected to the third semiconductor layer via the graded composition layer and the active layer. Furthermore, Katoh (5,010,382) (cf. Information Disclosure of Paper No. 14) does not disclose the base electrode to be provide an electrical connection to the third semiconductor layer either because the active layer in applications of the heterojunction bipolar transistor is the interface between layers 3 and 4a (cf. col. 6, lines 13-33) and is located in the mesa rather than along the path connecting the base electrode 6 (cf. col. 7, line 68) and is therefore not a chain in the aforementioned electrical connection.

Drawings

4. New corrected drawings are required in this application because:
5. *Figures 17-20* should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Proposed drawing corrections are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
6. *Figure 1* should be corrected as follows: layers 101 and 106 should have dashes run from bottom right to upper left, instead of bottom left to upper right, in order to indicate the p-type conductivity of said layers 101 and 106 (see disclosure on page 19).
7. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to

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the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Conclusion

8. This application is in condition for allowance except for the following formal matters (A) and (B):

(A) Drawing Corrections as formulated above in paragraphs 6 and 7;

(B) Cancellation of claim 2-11 previously withdrawn in the election without traverse as stated in Paper No. 9.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johannes P Mondt whose telephone number is 703-306-0531. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 703-308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JPM

June 30, 2003